Global Strike

Joint Integrating Concept

Version 1.0

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DISCLAIMER

In some cases, this JIC may contain titles or language similar to existing or planned future programs, solutions, solution sets, etc. In those situations, the language is used to facilitate a common understanding of conceptual elements or fundamental capabilities only. In addition, Appendix D contains an illustrative CONOPS that refers to many programs, solutions, solution sets, etc. The references in Appendix D are for illustrative purposes only. References in the JIC are not to be used as justification for those programs or solution sets. An analytically supported Capability Based Assessment (CBA) is required to determine the suitability of a variety of solutions or solution sets to support the capabilities specified in this JIC.

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EXECUTIVE SUMMARY

The Joint Concept Development and Revision Plan (JCDRP) defines a Joint Integrating Concept (JIC) as a description of how a joint force commander (JFC) integrates capabilities 10-20 years in the future to generate effects and achieve an objective. A JIC includes an illustrative Concept of Operations (CONOPS) for a specific scenario (vignette) and a set of distinguishing principles applicable to a range of scenarios. JICs have the narrowest focus of all concepts, and distill capabilities derived from Joint Operating Concepts (JOCs) and Joint Functional Concepts into fundamental tasks and measures required to conduct Capability Based Assessment (CBA).

This paper describes a concept for conducting Global Strike (GS) operations during the "Seize the Initiative" (STI) phase of a major combat operation (MCO) in 2015. The principle purpose of this concept is to support rigorous capabilities-based assessment and analysis to determine materiel and non-materiel solutions to capability gaps and redundancies throughout the Department of Defense. As the basis for performing this assessment, this concept identifies effects, capabilities, tasks, attributes, conditions, and standards for conducting future Global Strike.

Within the context of this concept, GS is defined as responsive joint operations that strike enemy high value / payoff targets (HVTs/HPTs), as an integral part of joint force operations conducted to gain and maintain

battlespace access, achieve other desired effects and set conditions for follow-on decisive operations to achieve strategic and operational objectives. This concept identifies and describes the capabilities for conducting Global Strike operations in 2015 and is consistent with and does not deviate from current strategic guidance.

This concept integrates primarily the military functions of force application, command and control, battlespace awareness, net-centric operations, protection, and focused logistics. Each of these is described in a separate Joint Functional Concept. This concept complements and does not duplicate those concepts. It will describe the integration of those functions for Global Strike operations and will discuss individual functions only if unique to Global Strike. The types of military operations that could be conducted during Global Strike are described in various Joint Operating Concepts and other JICs. This concept is under the Major Combat Operations-Seize the Initiative-Operational Access rubric with interdependencies among all of the Joint Integrating Concepts. This concept focuses on how Global Strike operations will enhance and enable these JICs and discusses the actual conduct of those operations only if unique to Global Strike.

The GS JIC envisions the joint force commander employing joint capabilities anywhere in the world, through and in any domain, at the time of his choosing to neutralize or destroy high value / payoff targets

(HVTs/HPTs) in support of joint force efforts to achieve the following effects:

- Freedom to operate and freedom from attack (gain and maintain operational access)
- Enemy's will or capabilities significantly reduced
- Conditions set for decisive operations

Global Strike operations will be executed anywhere in the world using CONUS-based, forward-based, or deployed forces in a joint planning and execution environment with short timelines.

1. Purpose

The Joint Concept Development and Revision Plan defines a Joint Integrating Concept (JIC) as a description of how a joint force commander (JFC) integrates capabilities 10-20 years in the future to generate effects and achieve an objective. A JIC includes an illustrative CONOPS for a specific scenario (vignette) and a set of distinguishing principles applicable to a range of scenarios. JICs have the narrowest focus of all concepts, and distill capabilities derived from Joint Operating Concepts (JOCs) and Joint Functional Concepts into fundamental tasks and measures required to conduct CBA.

This paper describes a concept for conducting Global Strike operations during the STI phase of a major combat operation (MCO) in 2015. The principle purpose of this concept is to support rigorous capabilities-based assessment and analysis to determine materiel and non-materiel solutions to capability gaps and redundancies throughout the Department of Defense. As the basis for performing this assessment, this concept identifies effects, capabilities, tasks, attributes, conditions, and standards for conducting future Global Strike.

In addition, this concept is intended to help drive joint and service experimentation. When potential near-term solutions are identified, this concept will also inform the efforts of combatant commanders and others to improve Global Strike capabilities.

2. Scope

2.1 Concept Definition

Within the context of this concept, Global Strike is defined as responsive joint operations that strike enemy high value / payoff targets (HVTs/HPTs), as an integral part of joint force operations conducted to gain and maintain battlespace access, achieve other desired effects and set conditions for follow-on decisive operations to achieve strategic and operational objectives. This concept identifies and describes the capabilities for conducting Global Strike operations in 2015 and is consistent with and does not deviate from current strategic guidance.

Global Strike requires the ability to prepare, enable, and execute operations to achieve operational and strategic effects. Effects-based analysis, planning, targeting and execution combine to support attacks on HVTs / HPTs, shape the information domain, and support setting the conditions for follow-on, decisive operations. This target set will include weapons of mass destruction and weapons of mass effect (WMD/WME) production, storage, and delivery capabilities, critical command and control facilities, anti-access capabilities (radars, surface-to-air missile sites, theater ballistic missile sites), adversary leadership, populace perception, and key nodes. In order to engage these targets, the joint force will require the capability to find, fix, track, and target moving targets. Global Strike operations will generate effects through lethal, non-lethal, kinetic, and non-kinetic attacks.

Because one of the essential effects of Global Strike is gaining and maintaining operational access for follow-on operations, early Global Strike operations must occur in an anti-access environment. These operations must not only overcome access barriers such as distance, physical hardening, and active and passive defenses, but also set conditions for other forces to operate freely. Although this JIC is set in an anti-access environment, the identified capabilities are also applicable in lower threat conditions.

Global Strike operations will normally be executed within compressed timelines (from seconds to days) while exerting persistent effects at potentially great distances from the continental United States and forward bases. These operations will include attacks against fleeting, "time-sensitive targets." Global Strike operations must be executable without requiring establishment of a large logistical footprint.

2.2 Potential Risks

If events unfold as described in this concept, there may be several associated risks. For this discussion, these risks fall into three broad categories as listed in the following sections: Science and Technology; Enemy Counter Strategies; and Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities (DOTMLPF).

2.2.1. Science and Technology

- Advances in the Global Information Grid (GIG) do not integrate cross-service, horizontally, or vertically
- US and multinational force weapons development efforts prove inadequate to overcome adversary use of hardened and deeply buried facilities to protect key capabilities
- An inability to field capabilities that can find, fix, track, target, and engage (F2T2E) moving targets responsively
- An inability of all US forces to share a common operating picture (COP) throughout the battlespace
- An adversary will weaponize space to deny access
- Effects-based assessment capability is limited or technologically incapable of providing useful information for dynamic tasking

2.2.2. Enemy Counter Strategies

- Adversary advances in camouflage, concealment and deception (CCD) capabilities may outpace US and multinational capabilities to find, fix, track, and target items of interest
- Adversary advances in computer network defense (CND) capabilities may outpace US and multinational capabilities to penetrate adversary computer networks
- Adversary anti-access capability development exceeds US ability to counter

- Adversary employs GIG and COP denial capabilities including computer network (CNA) and high-altitude electromagnetic pulse / electromagnetic pulse (HEMP/EMP) attack

2.2.3. DOTMLPF

- Inter-service training does not keep up with doctrinal improvements
- Logistics throughput proves inadequate for ten-day STI persistence
- Inadequate basing for forward deployed/based capabilities

2.3 Military Operations Relationships to Other Joint Concepts

Within the context of this concept, GS is specifically linked to the MCO JOC; however, the capabilities identified in this concept apply across the range of military operations. This concept is also relevant to the Homeland Security (HLS), Stability Operations (SO), and Strategic Deterrence (SD) JOCs.

GS capabilities such as surveillance, reconnaissance, intelligence, planning and strike support Homeland Security activities including the Global War on Terrorism (GWOT). These same capabilities can also be essential for supporting Stability Operations. An example of the latter is striking a fleeting insurgency target in eastern Afghanistan with little warning.

Maintaining GS capabilities in a constant readiness state and regularly demonstrating these capabilities contributes to achieving strategic deterrence. The adversary's perception of US awareness of its

activities, our capability of denying him benefits and/or imposing unacceptable costs, and our willingness to do so may induce restraint.

2.4 Applicable Military Functions and Activities

GS operations require the capabilities to effectively plan, control, and execute from and to anywhere in the world in any domain (land, sea, air, space and cyber-space) to generate strategic and operational effects. These capabilities cut across the family of the Joint Functional Concepts – Battlespace Awareness (BA), Command and Control (JC2), Force Application (FA), Net Centric (NC), and to a lesser degree Protection (P) and Focused Logistics (FL).

The Joint Staff will assess the tasks identified in this concept to identify capability shortfalls and redundancies. Six of the eight Functional Capability Boards (FCBs) will perform this CBA on the tasks relevant to each functional area. Appendix C summarizes the critical Global Strike capabilities and tasks, and indicates which FCB(s) should be primary assessor(s) for each task.

The Battlespace Awareness FCB should focus assessment efforts on capabilities that: support command and control of BA assets; execute collection actions; exploit and analyze collected intelligence; model, simulate and forecast adversary actions; and manage knowledge and actionable intelligence for decision-makers in support of GS missions.

The Joint Command and Control FCB should focus assessment efforts on capabilities that reduce decision-making cycle timelines,

increase joint planning commonalities, and enhance Service component interdependencies. JC2 will also assess capabilities that enable positive C2 throughout all aspects of GS operations, from posturing and deploying forces and assets through the killchain (Find, Fix, Track, Target, Engage, and Assess) emphasizing persistence and responsiveness.

The Force Application FCB should focus assessment efforts on capabilities that increase hard and deeply buried target (kinetic and functional) kill, agent defeat (neutralization), surface moving target (land and sea), CNA, information operations and stealth improvements capabilities, and reduce planning cycle times to facilitate time-critical targeting throughout the AOR.

The Net-Centric FCB should focus assessment efforts on capabilities (technical and knowledge) that form the basis for a globally synchronized, interdependent joint force with common situational awareness/understanding.

The Protection FCB should focus assessment efforts on capabilities that prevent enemy disruption of US and allied operations, specifically airborne, ballistic and cruise missile defense, CND, information protection, and survive-to-operate in a WMD/WME environment.

The Focused Logistics FCB should concentrate assessment efforts on capabilities needed to deploy, sustain, and enable Global Strike forces for the ten-day STI phase of an MCO.

2.5 Assumptions

An assumption is a condition necessary for the concept to succeed / be valid that cannot be proven through available evidence. The following assumptions apply for this concept:

- The 1-4-2-1 force sizing construct remains in effect
- The Global War on Terrorism continues
- The 2012 Baseline Security Posture is extant and remains valid
- For this JIC, Global Strike operations will occur within the 10-30-30 Defense Strategy timelines
- The GIG and COP exist and are functioning at all levels

2.6 Relationships to Other Joint Concepts

This concept focuses on Global Strike operations with an explicit recognition of the overlap with other JICs. For example, Integrated Air and Missile Defense (IAMD) and Global Strike JICs both identify attacking airborne targets as a key capability. The task of destroying anti-access systems to enable "freedom to operate" and "freedom from attack" reside in both concepts, but its offensive nature is emphasized in the Global Strike JIC. Conversely, defending against airborne attack receives greater emphasis in the IAMD JIC.

Another example of common tasks is the interrelationship among the operations described in the Global Strike JIC and the Seabasing, Joint Forcible Entry Operations (JFEO), and Joint Undersea Superiority (JUSS) JICs. Global Strike capabilities will help establish air superiority and set

other conditions necessary for successful implementation of Seabasing and JFEO. Once in place, sea based forces and capabilities can be employed to engage HVT/HPT or to support Global Strike operations. These forces will depend, in turn, on the capabilities described in the JUSS JIC, as well as the capabilities described in this concept, for freedom to operate and freedom from attack. The complementary nature of these JICs reinforces the interdependent nature of joint force operations.

2.7 Impact of Strategic Guidance

The Defense Planning Guidance (DPG) contains defense strategy and the guidance for key planning and programming priorities to execute that strategy. The DPG presents the Secretary of Defense's strategic plan for developing and employing future forces. The following extract from the 2004 DPG underscores several key elements of this concept: the transition to a campaign to swiftly defeat an adversary (seize-the initiative), the requirement to project power over potentially long distances, and timeliness (responsiveness).

(U) Experience has taught us that the best way to defend the United States, its interests abroad and its allies and friends is to defeat aggression at its source. As a result, a central element of our defense strategy is to:

- *Rapidly transition from a posture of forward deterrence into a joint campaign aimed at swiftly defeating the efforts of adversaries who would seek to impose their will on us or our allies and friends, while preserving the option of decisively defeating any one adversary – to include changing its regime and occupying its territory.*

(U) The new defense strategy requires forces with strategic agility capable of bringing power to bear over long distances in a timely fashion while conducting an active defense of US territory.

- Secretary's Forward to the 2004 Defense Planning Guidance (p. 2)

The Quadrennial Defense Review (QDR) provides a top-down look at US defense strategy, taking into account the world environment, threats, current forces and programs, and the resources likely to be available. The following extract from the 2001 QDR reinforces the need for responsiveness. The final sentence, calling for long-range precision strike capabilities, sets the stage for many of the key capabilities described in this concept.

U.S. forces will remain capable of undertaking major combat operations on a global basis and will train to be effective across a wide range of combat conditions and geographic settings. The focus will be on the ability to act quickly when challenged and to win decisively at a time and place and in the manner of the President's choosing.

For planning purposes, U.S. forces will remain capable of swiftly defeating attacks against U.S. allies and friends in any two theaters of operation in overlapping timeframes. Combat operations

will be structured to eliminate enemy offensive capability across the depth of its territory, restore favorable military conditions in the region, and create acceptable political conditions for the cessation of hostilities. In addition, U.S. forces will degrade an aggressor's ability to coerce others through conventional or asymmetric means, including CBRNE weapons. U.S. forces will fight from a forward deterrent posture with immediately employable forces, including long-range precision strike capabilities from within and beyond the theater, and rapidly deployable maneuver capabilities.

- Quadrennial Defense Review, September 30 2001 (Chapter III, Paradigm Shift in Force Planning, *Major Combat Operations, P. 21*)

3. Central and Supporting Ideas

3.1 Statement of the Military Problem to Be Solved

In 2015, joint forces will be required to operate anywhere in the world from the continental United States, forward bases, and the sea. Future US forces will require both greater operational reach and greater persistence than current forces. The strategic and operational challenges associated with executing Global Strike primarily center on two areas:

1) The ability to understand an adversary's operational systems and methods, and his decision-making processes, in order to identify Center(s) of Gravity and HVTs / HPTs; and

2) The physical challenges associated with striking specific Global Strike targets.

Understanding an adversary's systems, methods and decision-making processes requires a collaborative effort by the US military, government agencies, and multinational partners with significant shared responsibilities. A clear challenge is establishing the responsibilities, mechanisms and collaborative networks that enable gaining the desired level of understanding.

In the 2015 operational environment, the set of enemy targets most applicable for Global Strike (IADS, WMD/WME, TBMs, leadership, C2 infrastructure and networks, etc.) are likely to be employed and protected in ways that offer significant challenges to location, identification, and negation or destruction. Techniques to protect these high value assets

and capabilities could include hardening, deeply burying, hiding, concealing, camouflaging, and the use of asymmetric or irregular tactics such as integrating into/hugging civilian infrastructure. The fleeting nature of many of these targets, the high level decision authority for select strike missions, and the potentially great physical distances over which reconnaissance, surveillance and/or strike assets will be required to operate will compound the challenge of planning and executing responsive Global Strike. Key challenges associated with this environment include:

- Neutralizing or destroying HVTs / HPTs located deep in enemy territory and protected by significant air and missile defense systems, hardening, or burying;
- Destroying and/or neutralizing WMD/WME capabilities without causing substantial collateral damage;
- Executing Global Strike in distant theaters on very short notice
- Executing Global Strike (including finding and tracking) on key enemy leaders or other similar fleeting (time sensitive) targets;
- Identifying and precisely striking critical nodes and links in key adversary systems.

Joint force commanders must be able to responsively strike high value and high payoff targets in this environment to effectively conduct Global Strike. Likely adversaries will include near-peer traditional state actors/major regional powers or transnational actors.

A traditional state actor/regional power may possess large, modern ground forces, supplemented by specialized paramilitary and local militias. Air and naval forces may be less capable than US forces, but sufficient for regional domination. It is likely that this adversary's force planning, military capabilities, and strategy will be based on a fundamental assumption that a US-led coalition will present the most likely obstacle to its regional hegemony. This adversary will be expected to have significant anti-access and area denial capabilities with modern technologies in a number of niche areas, including communications, computers, intelligence, integrated air defenses, mines, submarines, long-range fires, unmanned aerial vehicles, WMD/WME (including nuclear weapons and associated delivery systems), HEMP/EMP capabilities, and access to space.

This adversary will attempt to counter perceived US capabilities through increased mobility and better distribution, miniaturization, hardening, camouflage, concealment and deception, and shorter exposure operating cycles. If called upon to swiftly or decisively defeat this adversary, the joint force will have to fight to gain and maintain operational access in order to seize the initiative.

The future security environment will also include threats to US vital interests posed by a variety of non-state actors, primarily in the form of transnational terrorism. Anti-access and area denial capabilities will proliferate and failed states will increasingly serve as havens for hostile

non-state actors. In the context of the Global War on Terrorism (GWOT), the US and her multinational partners will continue efforts to deter and defeat WMD/WME proliferation to prevent terrorists from obtaining such weapons or development technologies.

Even in the midst of an MCO campaign, joint forces will require the capability for time-critical targeting in support of GWOT in an AOR far removed from the ongoing MCO.

An illustrative vignette (CONOPS) for one possible MCO scenario is provided in Appendix D.

3.2 Central Idea

This concept describes the capabilities and tasks that will be required to achieve GS effects during the first ten days of an MCO campaign – specifically, the STI Phase. As discussed above, the capabilities needed for time-critical targeting in an AOR far removed from the ongoing MCO are also addressed.

Global Strike operations are executed against select HVTs / HPTs that support joint force operations to overcome adversary anti-access capabilities, produce other effects to achieve operational and strategic objectives, and enable follow-on decisive operations to defeat the adversary.

This concept envisions the joint force commander employing joint capabilities anywhere in the world through and in any domain at the

time of his choosing to neutralize or destroy HVTs and/or HPTs in support of joint force efforts to achieve the following effects:

- Freedom to operate and freedom from attack (gain and maintain operational access)
- Enemy's will or capabilities significantly reduced
- Conditions set for decisive operations

Global Strike operations will be executed anywhere in the world using CONUS-based, forward-based, or deployed forces in a joint planning and execution environment with short timelines.

3.3 Application of Concept within a Campaign Framework

Within the context of a joint campaign, and focused on generating the effects described previously, preparation and posturing are essential to successful GS operations. The right forces and capabilities must be in the right place at the right time and these forces must be trained and prepared to responsively execute GS in support of joint force operations.

The planning conducted during preparation and posturing relies on comprehensive joint and inter-agency collaboration that enables shared understanding, timely and informed decision-making, and development of timely and accurate products related to Global Strike mission planning and execution. The joint force commander, along with DoD and other government agencies involved in Global Strike planning will use this collaborative information and planning environment to establish a shared view of the adversary's operational systems, methods, and

decision-making processes in order to identify center(s) of gravity (COG), critical requirements (CR), critical capabilities (CC), and critical vulnerabilities (CV). Collaboration enhances the ability of commanders to gain situational awareness and coordinate force and capability posturing to optimize the application of Global Strike capabilities and the effects achieved. This comprehensive collaboration relies on a networked information environment involving warfighters, government agencies, decision makers, and multinational partners.

Collaborative planning and networking expedites the distribution of national and theater level guidance and decisions, the predictive analysis underpinning Global Strike planning, the dissemination of operational and strategic objectives and commander's intent, and the dissemination of Global Strike plans and orders.

Predictive analysis focuses planning on the adversary's COGs and CCs. It helps identify indicators and events that will confirm the accuracy of anticipated adversary activities and actions. Predicted events may provide the "trigger" mechanism for initiating Global Strike operations. Predictive analysis also enables the identification and understanding of nodes, linkages within the adversary system(s), and accurate delineation of expected effects. This visualization and analysis requires persistent collection to characterize adversary systems, dependencies, and relationships.

Predictive analysis and planning consider all available forces and capabilities, including CONUS-based, forward-based and deployed forces, and all appropriate combinations. The analysis includes examining the various combinations of forces and assets available to execute a Global Strike mission against the HVT/HPT, and assessing the ability of each to achieve the desired effect while minimizing unintended effects.

The analysis and planning conducted during preparation and posturing results in specific actions, consistent with national and theater level guidance, which include the following:

- Repositioning or reallocation of surveillance and reconnaissance assets to support target tracking, identifying and assessment requirements;
- Establishing communication links that provide required “sensor to sensor” and “sensor to shooter” links and positive C2 of Global Strike missions;
- Positioning or arranging for logistical support capabilities for potential/planned missions;
- Employing reconnaissance capabilities to support planning or future execution;
- Coordinating with multinational partners for use of airspace or territory; and
- Posturing forces for Global Strike missions.

Information Operations (IO) efforts will include planning and implementing strategic communications and public information announcements and releases (as appropriate). An integral part of Global Strike preparation and posturing, IO must include measures to protect friendly plans and networks and deny the adversary knowledge of pending operations. Mission planning includes planning for assessment of effects achieved and dynamically tasking if required and appropriate, plus disengagement/redeployment of forces and assets as applicable.

Preparing and posturing actions set the conditions for successful execution of Global Strike operations. Forces and assets for specific Global Strike missions will be selected based on a myriad of factors including target characteristics, location and defensive/protection status, desired effects, time constraints or considerations, diplomatic considerations or limitations, and multinational involvement. Some operations may require minimum preparation time while others may require precise timing at some point in the future. Where appropriate, forward-based or deployed forces and assets can be used to execute strikes to enhance responsiveness, surprise, and survivability. In other cases, CONUS-based forces and assets may be the optimal solution for strike execution; however, use of these assets may complicate response and surprise challenges, reinforcing the need to posture these forces and assets early. Some preparation and posturing actions will require a national level decision for execution.

A unique aspect of Global Strike operations is the likelihood that forces will originate outside the affected regional component commander's AOR. An organizational C2 structure must be clearly specified to maximize mission effectiveness and minimize friction and "fog of war" among all HQs involved in Global Strike operations. The controlling HQ (JF HQ, JTF HQ, COCOM HQ, etc.) located in CONUS or in-theater initiates mission execution and exercises positive command and control of mission forces and assets through mission completion and assessment. As mentioned above, in some circumstances multiple HQs will control individual missions at various points in time; therefore command relationships throughout the entire operation must be clearly specified during planning.

The commander must establish the requisite communications links to ensure comprehensive "sensor-to-sensor" and "sensor-to-shooter" data flow and positive C2, which is made much less complex by the extant plug-and-play network. Assured communications with the strike forces and supporting surveillance and reconnaissance assets, which may include CONUS-based/launched, and forward based/deployed forces (air, land, sea, cyber) and combinations thereof, as well as national, interagency and multinational assets, is essential to maintaining positive command and control. The controlling HQ monitors execution of the mission, updates its analysis as the mission progresses, and provides mission updates and mission changes directly to strike forces, including

573 the redirection of strike assets to other higher priority targets as
574 appropriate.

575 In support of strike execution, collection assets continue to
576 track/monitor HVTs / HPTs, providing continuous location and status
577 updates, enabling the controlling HQ to have an immediate assessment
578 of effects achieved, and enabling dynamic tasking (if required and
579 appropriate.) IO, strategic communications, public information
580 warnings and announcements may also be executed before, during
581 and/or after strikes to enhance effectiveness.

582 Once achievement of the desired effect is confirmed, the controlling
583 HQ directs and monitors the disengagement of forces and assets as
584 applicable. This disengagement could include redeployment, transition
585 to other Global Strike missions, or transition to other type missions.

4. Capabilities, Tasks and Attributes

Global Strike operations rely upon three types of capabilities: preparation, enabling, and execution capabilities. These capabilities will be required for all phases of an operation; however the weight of effort will shift as planning progresses through execution. Each capability and task will be measured using a set of attributes specified in Section 4.2.

4.1 Capabilities and Tasks

The capabilities and tasks required to prepare for, enable, and execute Global Strike operations follow. These capabilities and tasks are also listed in table format in Appendix C.

4.1.1 Preparation

The capabilities required to prepare for Global Strike operations consist of monitoring potential adversaries (and others) and planning. Preparation includes both long- and short-term actions. Long-term preparation involves analysis of world trends with the goal of identifying potential future problem areas. This will reduce crisis planning timelines and assist with predictive analysis as well as guide shaping and deterrence actions. Short-term preparation deals more specifically with rapidly emerging threats and continues into and throughout an actual conflict. In both cases, preparation should be seamless and cyclical.

4.1.1.1 Monitor Potential Adversaries

Successful Global Strike operations will require long-term and in-depth knowledge of potential adversaries. In order to achieve this, the

joint force will monitor, task, and integrate intelligence collected from tactical, theater and national assets; analyze adversary culture, leadership, command and control and military capabilities; and predictively analyze adversary intentions, goals, and objectives.

Intelligence tasks supporting Global Strike include the ability to detect, identify, characterize and track items, activities, events, and persons worldwide. These capabilities require persistent observation, reconnaissance, and information collection from both open and clandestine sources. Collection activities must access remote and denied areas and defeat camouflage, concealment, and deception (CCD) through sensor positioning and the development of new sensing capabilities. Furthermore, these activities should be tailorable to enable both wide-area and narrowly focused coverage in order to find, fix, and continuously track specific targets.

As GS operations proceed, commanders will need to prioritize limited resources. This will require informed trade-offs between competing collection requirements. Commanders must have the ability to dynamically task specific collection assets and resources to satisfy requirements, perform higher-priority missions, and synchronize ISR tasks with operations.

In order to produce actionable intelligence for the commander, joint forces must retrieve, filter, combine, and display information from various sources and ensure the right information reaches the decision-

maker in a useable format. The joint force must leverage technical advances to enhance intelligence information dissemination.

Tasks:

- Develop adversary characterization through long-term, in-depth intelligence collection and exploitation;
- Determine adversary critical capabilities and vulnerabilities;
- Identify, assess and mitigate intelligence gaps;
- Process and fuse collected data into intelligence;
- Dynamically task collection assets;
- Find targets (moving, mobile, hardened and/or underground, concealed, critical infrastructure, leadership, WMD/WME and related facilities and systems);
- Fix targets (moving, mobile, hardened and/or underground, concealed, critical infrastructure, leadership, WMD/WME, and related facilities and systems);
- Track targets (moving and mobile); and
- Target (moving; mobile; hardened and/or underground; concealed; critical infrastructure; leadership; WMD/WME and related facilities and systems targets).

4.1.1.2 Plan

Planning for Global Strike operations should begin pre-crisis and continue throughout MCO. Long-term, deliberate planning should be a continuous, cyclical process that provides the foundation for rapid,

seamless transition to crisis action planning. Global Strike operational course of action (COA) development should be effects-based, focused on exploiting adversary critical vulnerabilities while considering friendly critical capabilities as well as collateral damage.

Effects-based planning for GS operations begins with commander's intent and the strategic/operational objectives. Planners must collaborate with all relevant combatant commands, US government agencies and multinational partners. The joint force should leverage networking and automation to assist in planning and decision-making.

Planners must have the ability to predict desirable and undesirable attack consequences and how effects may propagate throughout an adversary's system while maintaining flexibility and initiative when the unexpected occurs. This analysis will guide COA development as well as post-strike collection efforts to assess mission success.

Tasks:

- Perform collaborative deliberate planning;
- Perform collaborative crisis planning;
- Determine commander's intent;
- Develop course of action;
- Determine HVTs/HPTs;
- Evaluate strike consequences;
- Estimate collateral damage; and
- Identify friendly critical capabilities.

4.1.2 Enabling

Global Strike enabling capabilities support preparation and execution activities. These capabilities consist of Joint Command and Control (JC2) and Net-Centric (NC) operations. The enabling capabilities provide the joint force commander with all required information about the operational environment and the means to disseminate guidance and orders to all force echelons.

4.1.2.1 Joint Command and Control (JC2)

As with all military operations, effective command and control of GS operations is essential. GS JC2 must be structured for the rapid dissemination and distribution of decisions and guidance from the President and/or Secretary of Defense. The JFC must have an accurate picture of the operating environment depicting all friendly forces, adversary forces, and neutral parties. Furthermore, the commander requires an integrated network and collaborative environment for disseminating orders, mission statements, commander's intent, desired end states, desired effects, and desired objectives to all force echelons.

In the context of MCO, GS operations will require synchronization and coordination with multiple regional component commanders, multinational partners, and US government agencies. Multiple, and often simultaneous, GS operations may be distributed across one or more joint operating areas (JOAs). The forces conducting Global Strike may originate in one commander's AOR, transit through one or more

additional AORs, and achieve the intended effects in still another commander's AOR. As discussed previously in Section 3.3, command relationships throughout the entire operation must be clearly specified and understood at all echelons.

Finally, considering the close relationship between Global Strike operations and operational/strategic objectives and the political sensitivities associated with strikes of this nature, the commander may in some circumstances need the capability to change or terminate missions after giving an execution order.

Tasks:

- Identify and track all adversaries and neutrals in the JOA;
- Identify and track all "Blue" forces in the JOA;
- Specify command relationships for GS operations;
- Communicate orders to all echelons;
- Terminate/change strike missions;
- Identify and precisely locate critical nodes and links in various adversary key systems associated with important military or economic activities;
- Improve cultural awareness to understand actions, groups, and ideologies influencing the targeted regional populace; and
- Develop an understanding of the adversary that accounts for all Political, Military, Economic, Social, Infrastructure, and Informational (PMESII) factors.

4.1.2.2 Net-Centric (NC) Operations

A critical enabling capability, NC operations are essential to the conduct of future war. GS operations will rely upon net-centricity to meet the anticipated response requirements and to achieve the high degree of collaboration required from planning through execution. The machine-machine and human-machine interfaces at the core of net-centricity will enable superior information flow, shorter response timelines, and more accurate execution within established parameters.

Net-centricity will allow the joint force to establish, adapt, manage, and optimize communications and connectivity. GS operations' information sharing will require secure data transmission, transport (air waves, hard line, bandwidth "pipe," etc.), reception, voice, image and video signals' capabilities. The networks supporting joint forces must be scalable and adaptable. These networks must rapidly transfer and sort multi-level intelligence.

The increased net-centricity emphasis along with the associated technological requirements creates new vulnerabilities. Network, signals, and information protection and defense will be critical to NC operations.

Tasks:

- Deploy network linking all joint force elements (interoperability);
- Deploy network linking joint force with other government agencies;
- Protect the network and data within;
- Transfer and sort updated multi-level intelligence;

- Adjust communications links and filters to enable establishment of required “sensor to sensor” and “sensor to shooter” links;
- Establish appropriate organizational relationships; and
- Operate interdependently.

4.1.3 Execution

Global Strike execution capabilities include actual strike mechanics (kinetic or non-kinetic) and effects assessment. These capabilities will characterize the joint forces conducting Global Strike operations and provide the commander with the information needed to evaluate mission results.

4.1.3.1 Global Strike

Achieving effects at the time and place of our choosing is the essence of GS operations. These effects must be precise and scalable, and in the context of MCO, persistent. As discussed previously, the responsiveness required for Global Strike operations is situation dependent; however, in all cases, the joint force must have the capability to conduct and support multiple, simultaneous attacks, often at extended ranges. These strikes may be executed by air, ground, space, maritime, or special forces, and will be delivered through and into any domain.

The responsiveness of the joint force to Global Strike tasking will depend on force structure, mobility/speed, and standoff capabilities. Force structure falls into three categories, CONUS-based, forward

stationed, and forward deployed. Mobility/speed and standoff capabilities are inherent characteristics of particular forces.

Following an execution order, GS operations can be characterized by two phases—maneuver and engagement. Joint forces executing Global Strikes must be capable of maneuvering in a robust anti-access environment. For information operations and other non-kinetic actions, the maneuver phase can be visualized as the events immediately proceeding effects delivery.

GS operations must be able to engage the full range of fixed, mobile, time critical, and specialized targets (including C2 nodes, leadership, missiles, WMD/WME, and HDBT). These targets will be engaged using kinetic weapons and other non-kinetic means based on the nature of the target and the desired effects. Adversary integrated air defenses and theater ballistic missiles will be engaged utilizing low-observable systems or other technologies to deny detection. Global Strike operations will require highly reliable forces capable of achieving precise effects such as biological or chemical agent defeat. Collateral damage must be minimized. Operating environments will include complex and urban terrain.

Tasks:

- Posture forces (forces and facilities);
- Position forces to engage (maneuver);
- Engage WMD/WME production, storage, and delivery targets;

- Neutralize WMD active agents;
- Engage moving land targets;
- Engage moving maritime targets;
- Engage airborne targets;
- Engage hard and deeply buried targets (destroy or functionally disable);
- Engage leadership targets;
- Attack computer networks and other IO targets;
- Deceive, disrupt, deny, degrade, and destroy (D5) anti-access capabilities; and
- Recover and regenerate forces.

4.1.3.2 Assess and Report

Effective combat assessment is essential to GS operations. In the dynamic battlespace environment with changing conditions and effects prioritization, an enroute termination and dynamic tasking capability requirement will give the commander the greatest battlespace flexibility.

The joint force must have the capability to evaluate, via observation or other means, the success of GS operations. Beyond the traditional notion of battle damage assessment, future GS operations will also rely upon a rapid systemic analysis to evaluate not only first-order but also higher-order effects. Long-term evaluation, however, will also be required to evaluate some effects.

Commanders must have these mission results and make these results readily available to forces at all echelons.

Tasks:

- Determine immediate objective results
- Determine long-term objective results
- Report mission status

4.2 Attributes

Global Strike capabilities and tasks will be measured using the following set of specified attributes: Responsiveness, Survivability, Persistence, Effects Spectrum, and Surprise. Not all of these attributes will apply to all the capabilities and tasks described in this concept. The tables in Appendix C identify which attributes apply to each task.

5. Implications

5.1 Capability Based Assessment

The GS JIC is written to focus the CBA within the functional areas, across the functional areas, and across the different JICs, as discussed below.

5.1.1 Within Functional Areas

Each of the tasks listed in Section 4 and Appendix C has one (or more) Functional Capabilities Board (FCB) assigned for assessment. However, each FCB should review the entire list of tasks and assess any additional tasks they deem appropriate. This process will help ensure that each FCB is aware of and provides the GS capabilities needed from their individual Joint Functional Concept.

5.1.2 Across Functional Areas

The identification of critical capabilities allows a focused CBA on the end-to-end integration of capabilities across two or more Joint Functional Concepts. This type of assessment can help ensure multiple FCBs are approaching the problem in a manner that ensures interoperability and full integration of capabilities needed for GS operations.

5.1.3 Among Different JICs

The specification of capabilities in Section 4 and Appendix C also allows a focused CBA on common capability needs across different concepts. This type of assessment can help provide insight into

demands for the same capabilities outside the individual concept. Examples include the surveillance, reconnaissance, and attack capabilities needed for GS, IAMD (Offensive Counter Air operations), Joint Forcible Entry Operations, and Joint Undersea Superiority.

5.2 Concept Experimentation

US Joint Forces Command, other combatant commands, and the Services should examine opportunities to conduct/sponsor experimentation, wargaming, and exercises centered on the concepts and capabilities identified in this Global Strike JIC. Observations and recommendations from these events should be sent to the lead developer and considered for incorporation into future versions of the concept. Proposed changes will be vetted through the Joint Capabilities Integration and Development System (JCIDS) process.

5.3 Limited Focus

This JIC focuses on the capabilities needed for gaining operational access, creating operational and strategic effects, and setting conditions for follow-on decisive operations in the STI Phase of an MCO. Additional concepts or future revisions of this concept should describe the employment of Global Strike capabilities across the entire range of military operations.

APPENDICES

Appendix A, Reference Documents

Battlespace Awareness Joint Functional Concept (version 1.0), Feb 04

CDRUSSTRATCOM CONPLAN 8022-02, Strategic Concept, 4 Jun 03

Command and Control Joint Functional Concept (version 1.0), Feb 04

Defense Planning Guidance, 2004-2009

Focused Logistics Joint Functional Concept (version 1.0), Feb 04

Force Application Joint Functional Concept (version 1.0), Feb 04

Global Strike CONOPS, HQ ACC, 24 May 04

Joint Concept Development and Revision Plan, 30 Jul 04

Major Combat Operations 2, DPS

Major Combat Operations Joint Operating Concept (version 1.0), 20 Jul 04

Marine Corps Doctrine Pamphlet 1, Warfighting, 20 Jun 97

National Military Strategy of the United States of America, 2004

National Security Strategy, Sep 2002

National Strategy to Combat Weapons of Mass Destruction, Dec 2002

Protection Joint Functional Concept (version 1.0), 30 Jun 04

Quadrennial Defense Review, 30 Sep 2001

Strategic Deterrence Joint Operating Concept (version 1.0), Jan 04

Strategic Planning Guidance, FY 2006-2011

Appendix B, Glossary

Part I. Abbreviations and Acronyms

APOD	Aerial Port of Debarkation
ASAT	Anti-satellite
BA	Battlespace Awareness
BSP	Baseline Security Posture
C2	Command and Control
CBA	Capability Based Assessment
CCD	Camouflage, Concealment, and Deception
CIE	Collaborative Information Environment
CNA	Computer Network Attack
CND	Computer Network Defense
CONUS	Continental United States
D5	Deceive, disrupt, deny, degrade, and destroy
DPG	Defense Planning Guidance
DPS	Defense Planning Scenario
F2T2EA	Find, Fix, Track, Target, Engage, Assess
FA	Force Application
HDBT	Hardened, Deeply Buried Target
HLS	Homeland Security
HPT	High Payoff Target
HVT	High Value Target
IAMD	Integrated Air and Missile Defense

912	**ICBM**	Inter-continental Ballistic Missile
913	**IO**	Information Operations
914	**IOT**	In order to
915	**JCDRP**	Joint Concept Development and Revision Plan
916	**JFC**	Joint Force Commander
917	**JFEO**	Joint Forcible Entry Operations
918	**JIC**	Joint Integrating Concept
919	**JOA**	Joint Operations Area
920	**JOC**	Joint Operating Concept
921	**JOpsC**	Joint Operations Concepts
922	**JUSS**	Joint Undersea Superiority
923	**LOC**	Line of Communication
924	**MCO**	Major Combat Operation
925	**MRBM**	Medium-range Ballistic Missile
926	**NCA**	National Command Authorities
927	**P**	Protection
928	**QDR**	Quadrennial Defense Review
929	**SD**	Strategic Deterrence
930	**SPG**	Strategic Planning Guidance
931	**SPOD**	Seaport Of Debarkation
932	**SRBM**	Short-rang Ballistic Missile
933	**STI**	Seize the Initiative
934	**UGF**	Underground Facilities

935 **WEZ** Weapons Engagement Zone

936 **WMD** Weapon of Mass Destruction

937 **WME** Weapon of Mass Effect

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Part II. Terms and Definitions.

Access. The ability to enter or use. (GS JIC WG)

Agent Defeat. Effects neutralization of chemical or biological agents

Assess. Evaluate the effect of and engagement. (GS JIC WG)

Attribute. A measurable characteristic that describes an aspect of a task or capability. (GS JIC WG)

Capability. A combination of means and ways to perform a set of tasks or achieve an effect to a standard under specified conditions. (JCDRP)

Effect. Change to a condition, behaviors, or degree of freedom resulting from tasked actions. (JCDRP)

Effects Spectrum. Strike with sufficient mass and variety to achieve the desired effect. (GS JIC WG)

Mass: Is there enough quantity to generate the desired effect?

Variety: Can a task generate disparate effects?

Engage. Strike the designated target (includes maneuver). (GS JIC WG)

Find. Locate a potential target and pass salient info IOT fix. (GS JIC WG)

Fix. Determine potential target position at a given time. (GS JIC WG)

High Value Target. A target the enemy commander requires for successful completion of the mission, the loss of which would seriously degrade important enemy functions. (JP 1-02)

High Payoff Target. A target whose loss to the enemy will significantly contribute to the success of the friendly course of action. Those high

value targets that must be acquired and successfully attacked for the success of the mission. (JP 1-02)

Military Objective. A derived set of military actions to be taken to implement NCA guidance in support of national objectives. Defines the results to be achieved by the military and assign tasks to commanders. (JP 1-02)

Mission. The task, together with the purpose, that clearly indicates the action to be taken and the reason therefore. (JP 1-02)

Persistence. The period of time the potential to create or sustain an effect can be maintained. (GS JIC WG)

Posture. To put into proper position before acting. (GS JIC WG)

Responsiveness. Ability to generate scaleable effects at the optimum time (i.e., rapidly, at a particular moment in time, over a period of time) and place. (GS JIC WG)

Strike. A lethal / non-lethal / kinetic / non-kinetic attack. (GS JIC WG)

Surprise. Achieve and effect at the optimum place and time without enemy foreknowledge. (GS JIC WG)

Survivability. Operate in an anti-access environment without significant threat of engagement or destruction. (GS JIC WG)

Target. Characterize and designate potential target for neutralization / destruction and matching appropriate response. (GS JIC WG)

Task. A measurable action or activity based upon doctrine, standard procedures, mission analysis, or concepts that may be assigned to an individual or organization. (GS JIC WG)

Track. Display or record the successive positions of a moving potential target and maintain awareness of a fixed potential target. (GS JIC WG)

Capability Category	Capability	Task	Attribute					
			Responsiveness	Persistence	Survivability	Effects Spectrum	Surprise	FCB
4.1.1. Preparation								
	4.1.1.1. Monitor Adversaries							
		Develop adversary characterization through long-term, in-depth intelligence collection and exploitation	X	X	X			BA
		Determine adversary critical requirements capabilities and vulnerabilities	X	X	X	X		C2/BA
		Identify, assess, and mitigate intelligence gaps	X	X	X	X	X	BA
		Process and fuse collected data into intelligence	X	X	X	X	X	BA
		Dynamically task collection assets	X			X	X	C2/BA
		Find (moving, mobile, hardened and/or underground, concealed, critical infrastructure, leadership, WMD and related facilities and systems targets)	X	X	X	X	X	BA
		Fix (moving, mobile, hardened and/or underground, concealed, critical infrastructure, leadership, WMD and related facilities and systems targets)	X	X	X	X	X	BA/C2
		Track (moving and mobile targets)	X	X	X	X	X	BA/C2
		Target (moving, mobile, hardened and/or underground, concealed, critical infrastructure, leadership, WMD and related facilities and systems targets)	X	X	X	X	X	FA/C2
	4.1.1.2. Plan							
		Perform collaborative deliberate planning	X	X	X		X	C2
		Perform collaborative crisis planning	X	X	X		X	C2
		Determine commander's intent	X	X			X	C2
		Develop course of action	X	X	X		X	C2
		Determine HVTs / HPTs	X	X	X		X	C2
		Evaluate strike consequences	X	X	X			C2
		Determine necessary strike scale	X			X		C2
		Identify friendly critical capabilities	X	X	X		X	C2/P

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Capability Category	Capability	Task			Attribute			
			Responsiveness	Persistence	Survivability	Effects Spectrum	Surprise	FCB
4.1.2. Enabling								
	4.1.2.1. Joint C2							
		Identify and track all adversary and neutrals in JOA	**X**	**X**	**X**	**X**	**X**	**C2/BA**
		Identify and track all "Blue" Forces in JOA	**X**	**X**	**X**	**X**		**C2/BA**
		Specify command relationships for Global Strike operations	**X**	**X**				**C2/NC**
		Communicate orders to all echelons	**X**	**X**	**X**	**X**		**C2/NC**
		Terminate / change strike missions	**X**	**X**				**C2/NC**
		Identify and precisely locate critical nodes and links in various adversary key systems associated with important military or economic activities	**X**	**X**	**X**	**X**	**X**	**C2/BA**
		Improve cultural awareness to understand actions, groups, and ideologies influencing the targeted regional populace	**X**	**X**				**C2/BA/P**
		Develop an understanding of the adversary accounting for all political, military, economic, social, infrastructure, and informational (PMESII) factors	**X**	**X**				**C2/BA/P**
	4.1.2.2. Net-Centric Operations							
		Deploy network linking all joint force elements (Interoperability)	**X**	**X**	**X**	**X**	**X**	**NC**
		Deploy network capable of linking joint force with other government agencies	**X**	**X**	**X**	**X**	**X**	**NC**
		Protect the network and data within	**X**	**X**	**X**	**X**		**P/NC**
		Transfer and sort updated multi-level intelligence	**X**	**X**	**X**			**NC**
		Adjust communications' links and filters to enable establishment of required "sensor to sensor" and "sensor to shooter" links	**X**	**X**	**X**	**X**	**X**	**NC**
		Establish appropriate organizational relationships	**X**	**X**	**X**	**X**		**NC**
		Operate interdependently	**X**	**X**	**X**	**X**		**NC**

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Capability Category	Capability	Task			Attribute			
			Responsiveness	Persistence	Survivability	Effects Spectrum	Surprise	FCB
4.1.3. Execution								
	4.1.3.1. Global Strike							
		Posture forces (forces and facilities)	**X**	**X**	**X**	**X**	**X**	**C2/FL/FA**
		Position forces to engage (maneuver)	**X**	**X**	**X**	**X**	**X**	**C2/FL/FA**
		Engage WMD production, storage, and delivery targets	**X**	**X**	**X**	**X**	**X**	**FA**
		Neutralize WMD active agents	**X**	**X**	**X**		**X**	**FA**
		Engage moving land targets	**X**	**X**	**X**	**X**	**X**	**FA**
		Engage moving maritime targets	**X**	**X**	**X**	**X**	**X**	**FA**
		Engage airborne targets	**X**	**X**	**X**	**X**	**X**	**FA**
		Engage hard and deeply buried targets	**X**	**X**	**X**		**X**	**FA**
		Engage leadership targets	**X**	**X**	**X**	**X**	**X**	**FA**
		Attack computer networks and other IO targets	**X**	**X**	**X**	**X**	**X**	**FA/NC**
		D5 anti-access capabilities	**X**	**X**	**X**	**X**	**X**	**FA/NC**
		Recover and regenerate forces	**X**	**X**	**X**	**X**		**FL/FA**
	4.1.3.2. Assess and Report							
		Determine immediate objectives results	**X**	**X**			**X**	**BA/C2/FA**
		Determine long-term objective results	**X**	**X**			**X**	**BA/C2/FA**
		Report mission status	**X**	**X**	**X**		**X**	**C2/NC/FA**

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Appendix D, Illustrative CONOPS

Appendix D is classified and published separate from the main body of this concept.